

Allowable Subject Matter

Claims 224-242 are allowed.

For the purposes of allowance the original numbering of the claims has been changed.

The following is an examiner's statement of reasons for allowance:

The general concept of directionally propagating audio signals from a speaker array such that the audio signals reflect from resonant or sound reflective surfaces so as to appear to emanate from respective different positions in space was known in the art as evidenced by Greenberger (US 5,870,484). However, the Examiner has not found prior art that teaches or suggests the modification of Greenberger in order to provide a system that obtains in respect to each of at least 6 transducers, a delayed replica of each input signal delayed by a respective delay selected in accordance with the position in the array of the respective output transducer and said respective position in space such that replicas for transducers closer to the respective position in space are delayed more than replicas for transducers further from the position in space such that the sound waves of the channel are directed towards the position in space in respect of that channel, as defined in the independent claims 224, 232 and 239. Other prior art has been cited herein regarding directional audio transducing, however the other prior art of record also fails to teach or provide suggestion to arrive the combination of the elements and steps presented in the independent claims, again when said elements or steps are collectively considered in regards to each claim. For at least the reasons

listed above, the dependent claims are also allowed in view of their respective dependencies upon the independent claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Weinreich (US 6,263,083 B1) discloses a directional tone color loudspeaker.

Croft (US 5,109,416) discloses a dipole speaker for producing ambience sound.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON R. KURR whose telephone number is (571)272-0552. The examiner can normally be reached on M-F 10:00am to 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571) 273-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason R Kurr/
Examiner, Art Unit 2614

/Vivian Chin/
Supervisory Patent Examiner, Art Unit 2614